

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
27 October 2005 (27.10.2005)

PCT

(10) International Publication Number
WO 2005/100189 A1

(51) International Patent Classification⁷: **B65D 47/32**,
A61J 9/04, 11/02

(21) International Application Number:
PCT/GB2005/001421

(22) International Filing Date: 13 April 2005 (13.04.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
0408135.2 13 April 2004 (13.04.2004) GB

(71) Applicant and

(72) Inventor: SMITH, Stephen, Michael [GB/GB]; 163
Wombridge Road, Trench, Telford, Shropshire TF2 6QA
(GB).

(74) Agents: BARTON, Russell, Glen et al.; Withers &
Rogers, Goldings House, 2 Hays Lane, London, SE1 2HW
(GB).

(81) Designated States (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

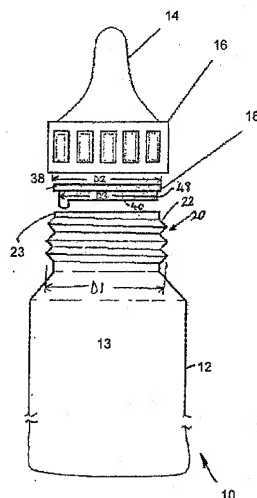
(84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: A BOTTLE ASSEMBLY AND A VENT DEVICE THEREFOR



(57) Abstract: A bottle assembly including a bottle having an opening for receiving a fluid, a closure for closing the opening, the closure having a fluid outlet to enable egress of the fluid from the bottle, and a vent device, the vent device comprising a one-way valve, a vent path being defined by the one way valve from the exterior to the interior of the bottle different from the fluid outlet, whereby the vent path permits air to vent into the bottle on creation of a partial vacuum as a result of the fluid passing to the exterior of the bottle via the fluid outlet. Another aspect of the present invention relates to a vent device for a bottle, the vent device comprising a vent aperture and a one-way valve in fluid communication with the vent aperture, a vent path being defined by the vent aperture.

WO 2005/100189 A1